



wherein wherein A^1 and A^2 are independently of each other a saturated, unsaturated or aromatic 5-6 membered cyclic ring system containing one or more carbon atoms and optionally from one to four heteroatoms selected from N, O or S, selected from the group consisting of cyclopentyl, cyclohexyl, phenyl, thiophenyl, furanyl, pyridinyl wherein said ring system is optionally substituted with one or more halogen, perhalomethyl, hydroxy, C_{1-6} -alkyl, (C_{3-6} -cycloalkyl) C_{1-6} -alkyl, C_{4-6} -alkenynyl, C_{2-6} -alkenyl, C_{2-6} -alkynyl, C_{1-6} -alkoxy, aryl, aryloxy, arylalkyl, arylalkoxy, heteroaryl, heteroarylalkyl, heteroaryloxy, heteroarylalkoxy, acyl, hydroxy C_{1-6} -alkyl, C_{1-6} -alkyl-amino, C_{1-6} -dialkylamino, arylamino, arylalkylamino, amino C_{1-6} -alkyl, C_{1-6} -alkoxy C_{1-6} -alkyl, aryloxy C_{1-6} -alkyl, or arylalkoxy C_{1-6} -alkyl;

Z is C;

Q is O or S;

----- represents a single bond or a double bond;

Ar is arylene or heteroarylene;

R^5 is hydrogen;

D1
cost
R⁶ is hydrogen;

M is OR⁷, where R⁷ is hydrogen, C₁₋₁₂-alkyl, C₄₋₁₂-alkenynyl, C₂₋₁₂-alkenyl, C₂₋₁₂-alkynyl, aryl, arylalkyl, C₁₋₁₂-alkoxyC₁₋₁₂-alkyl, acyl, heteroaryl, or heteroarylalkyl groups optionally substituted with one or more halogen, perhalomethyl, hydroxy, nitro or cyano or M is COYR⁸;

R⁸ is hydrogen, C₁₋₁₂alkyl, C₄₋₁₂-alkenynyl, C₂₋₁₂-alkenyl, C₂₋₁₂-alkynyl;

Y is oxygen;

k is an integer from 1 to 2, n and m are 1;

wherein heteroaryl is selected from furanyl, thiophenyl and pyridinyl;

aryl is selected from the group consisting of phenyl and naphthyl;

arylalkyl is selected from the group consisting of benzyl, phenethyl, 3-phenylpropyl, 1-naphthylmethyl, 2-(1-naphthyl)ethyl;

heteroaryloxy is a heteroaryl group linked to an oxygen atom;

heteroarylalkoxy is a heteroarylalkyl group linked to an oxygen atom, wherein said heteroarylalkyl is a straight or branched saturated carbon chain containing from 1 to 6 carbons substituted with a heteroaryl group, wherein said heteroaryl is selected from furanyl, thiophenyl and pyridinyl;

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cont
arylene is a divalent aromatic ring, selected from the group consisting of phenylene and naphthylene; heteroarylene is a divalent heteroaryl group selected from furanyl, thiophenyl and pyridinyl.

or a salt thereof with a pharmaceutically acceptable acid or base, or any optical isomer or mixture of optical isomers, or any tautomeric forms.

3. (Amended Three Times) The compound of claim 1, wherein A¹ and A² are independently of each other optionally substituted with one or more halogen, perhalomethyl, hydroxy, C₁₋₆-alkyl, (C₃₋₆-cycbalkyl)C₁₋₆-alkyl, C₄₋₆-alkenynyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, C₁₋₆-alkoxy, aryl, aryloxy, arylalkyl, arylalkoxy, heteroaryl, heteroarylalkyl, heteroaryloxy, heteroarylalkoxy, acyl, hydroxyC₁₋₆-alkyl, C₁₋₆-alkyl-amino, C₁₋₆-dialkylamino, arylamino, arylalkylamino, aminoC₁₋₆-alkyl, C₁₋₆-alkoxyC₁₋₆-alkyl, aryloxyC₁₋₆-alkyl, or arylalkoxyC₁₋₆-alkyl,

wherein heteroaryl is selected from furanyl, thiophenyl and pyridinyl;

aryl is selected from the group consisting of phenyl and naphthyl;

heteroaryloxy is a heteroaryl group linked to an oxygen atom;

heteroarylalkoxy is a heteroarylalkyl group linked to an oxygen atom, wherein said heteroarylalkyl is a straight or branched saturated carbon chain containing from 1 to 6 carbons substituted with a heteroaryl group, wherein said heteroaryl is selected from furanyl, thiophenyl and pyridinyl.

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D2
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4. (Amended Three Times) The compound of claim 1, wherein A¹ and A² are independently of each other optionally substituted with one or more halogen, C₁₋₆-alkyl,

D1
C2
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C1-6-alkoxy or aryl, wherein aryl is selected from the group consisting of phenyl and naphthyl.

C3
D1
25. (Amended Twice) The compound of claim 1, wherein M is OR⁷, where R⁷ is hydrogen, C₁₋₆-alkyl, C₄₋₆-alkenynyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, aryl, arylalkyl, C₁₋₆-alkoxyC₁₋₆-alkyl, C₁₋₆-alkoxycarbonyl, aryloxycarbonyl, C₁₋₆-alkylaminocarbonyl, arylaminocarbonyl, acyl, heteroaryl or heteroarylalkyl groups optionally substituted with one or more halogen, perhalomethyl, hydroxy, nitro or cyano, wherein heteroaryl is selected from furanyl, thiophenyl and pyridinyl;

aryl is selected from the group consisting of phenyl and naphthyl;

arylalkyl is selected from the group consisting of benzyl, phenethyl, 3-phenylpropyl, 1-naphthylmethyl, 2-(1-naphthyl)ethyl;

heteroarylalkyl is a straight or branched saturated carbon chain containing from 1 to 6 carbons substituted with a heteroaryl group, wherein said heteroaryl is selected from furanyl, thiophenyl and pyridinyl.

26. (Amended Twice) The compound of claim 1, wherein M is OR⁷, where R⁷ is hydrogen, C₁₋₆-alkyl, C₄₋₆-alkenynyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, aryl, arylalkyl, C₁₋₆-alkoxyC₁₋₆-alkyl, heteroaryl or heteroarylalkyl groups optionally substituted with one or more halogen or perhalomethyl;

wherein heteroaryl is selected from furanyl, thiophenyl and pyridinyl;

aryl is selected from the group consisting of phenyl and naphthyl;

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ary alkyl is selected from the group consisting of benzyl, phenethyl, 3-phenylpropyl, 1-naphthylmethyl, 2-(1-naphthyl)ethyl;

heteroarylalkyl is a straight or branched saturated carbon chain containing from 1 to 6 carbons substituted with a heteroaryl group, wherein said heteroaryl is selected from furanyl, thiophenyl and pyridinyl.

C 4
39. (Amended twice) A composition comprising, as an active ingredient, an effective amount of the compound of claim 1, together with a pharmaceutically acceptable carrier or diluent.

40. (Amended twice) The composition of claim 39 in unit dosage form, comprising from about 0.05 to about 100 mg of the compound.

41. (Amended twice) The composition of claim 39 in unit dosage form, comprising from about 0.1 to about 100 mg of the compound.

42. (Amended twice) The composition of claim 39 which is administered by the oral, nasal, transdermal, pulmonary, or parenteral route.

Please add new claim 54:

C 5
54. (new) The compound according to claim 1, wherein heteroarylalkoxy is a heteroarylalkyl linked to an oxygen atom having its free valence bond from the oxygen atom, said heteroarylalkyl selected from the group consisting of (2-furyl)methyl, (3-furyl)methyl, (2-thienyl)methyl, (3-thienyl)methyl and (2-pyridyl)methyl.